

data structure system **1450** may be used to provide recommended words in the device **800** (FIGS. **8A-8E**). A sequence of symbols **1462** (including one or more characters, symbols and/or words) may be provided by the user. A set of symbols **1462** corresponding to a context **1422-1** may be processed by a context map **1460**. In some embodiments, the context **1422-1** may be a null set, e.g., one or more recommended words are provided before the user provides any symbols **1462** in a current application session. In other embodiments, the context **1422-1** may include one or more previously entered or provided words as well as one or more symbols, such as the first one, two or three letters in a current word that the user is providing. The context map **1460** may include a select and hashing module **1464** and a hash map **1466**. The hash map **1466** may select one or more appropriate entries in an application-specific dictionary **1468**. The entries in the application-specific dictionary **1468** may include contexts **1470**, predicted words **1472**, and time-weighted scores **1472**. The application-specific dictionary **1468** may utilize the records in the user history data structure **1400**. As a consequence, the application-specific dictionary **1468** may be dynamically updated continuously, after pre-determined time intervals, or when a new word or syntax is employed by the user.

[0136] The language data structure system **1450** may be used to provide one or more recommended words based on the context **1422-1**. The context map **1460** may find a top-5 or top-10 best context **1470** matches. The corresponding predicted words **1472** may be recommended to the user in accordance with the time-weighted scores **1474**. In some embodiments, only a subset of the predicted words **1470** corresponding to the best context **1470** matches may be presented to the user (e.g., just the top-1, top-2, or top-3 predicted words).

[0137] In some embodiments, the language data structure system **1450** may provide one or more recommended words in accordance with a state machine (corresponding to a Markov sequence or process) that corresponds to a language. For example, the application-specific dictionary **1468** may be based on a stochastic model of the relationships among letters, characters, symbols and/or words in a language.

[0138] A path memory (such as up to three characters in a word that is currently being entered and/or two or three previously entered words) of the probabilistic model represents a tradeoff between accuracy and the processing and power capabilities (for example, battery life) of the portable communication device **100** (FIG. **1**). In some embodiments, such a probabilistic model may be based on a lexicography and usage that is user-specific and/or, as discussed previously, even application specific. For example, user emails, address book and/or other documents may be analyzed to determine an appropriate probabilistic model for that user based on the syntax and/or lexicography (including names and slang) that are employed by the user. The probabilistic model may be updated continuously, after pre-determined time intervals, or when a new word or syntax is employed by the user.

[0139] In some embodiments, the probabilistic model may be based on one or more mistakes made by the user when using the click wheel **114** (FIG. **1**) and/or a touch-sensitive display in the display system **112** (FIG. **1**). For example, if the user accidentally selects the wrong icon when typing a

respective word, the probabilistic model may be updated to account for such errors in the future. In an exemplary embodiment, a mistake may be determined based on a user activation of an icon corresponding to the delete function. This adaptability of the portable communication device **100** (FIG. **1**) may allow correction of user interface errors (such as parallax and/or left-right symmetry) associated with which finger(s) the user is using and how the user is holding the portable communication device **100** (FIG. **1**) while using it. This adaptability of the portable communication device **100** (FIG. **1**) may also be used to prevent the recommendation of misspelled words (e.g., by deleting such words from the user word history **150** or giving such words very low weighted scores).

[0140] In some embodiments the language data structure system **1450** may include fewer or more components. Two or more components may be combined and an order of two or more components may be changed.

[0141] The foregoing descriptions of specific embodiments of the present invention are presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed. Rather, it should be appreciated that many modifications and variations are possible in view of the above teachings. The embodiments were chosen and described in order to best explain the principles of the invention and its practical applications, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated.

What is claimed is:

1. A method, comprising displaying a first image of a rotary dial in a display of a portable communications device in response to a first contact by a user with a click wheel, wherein the first image of the rotary dial includes a plurality of icons arranged proximate to a periphery of the rotary dial, and wherein the plurality of icons include numbers.
2. The method of claim 1, further comprising scrolling around at least a portion of the first image of the rotary dial in response to one or more navigation commands received from the click wheel, wherein the one or more navigation commands correspond to the user moving the first contact around at least a portion of the click wheel.
3. The method of claim 1, further comprising highlighting a respective icon in the plurality of icons corresponding to a current position on the first image of the rotary dial.
4. The method of claim 1, wherein one or more letters corresponding to a respective icon in the plurality of icons are displayed along a radial direction of the first image of the rotary dial.
5. The method of claim 1, wherein one or more letters corresponding to a respective icon in the plurality of icons are displayed in a central region of the first image of the rotary dial.
6. The method of claim 1, further comprising receiving a user command using the click wheel, wherein the user command corresponds to a selection of a respective icon in the plurality of icons, and wherein the user command includes pushing down on the click wheel.
7. The method of claim 1, further comprising displaying a sequence of one or more selected icons in the display.
8. The method of claim 1, further comprising displaying a second image of the rotary dial in the display of the device